

CLAIMS

1. An information recording medium for storing data managed by a file system, to/from which data is
5 written/read via a command received from outside, the information recording medium comprising:

a receiving section operable to receive a command and data from outside;

10 a first recording area in which data writing is managed in first access unit;

a second recording area in which data writing is managed in second access unit larger than the first access unit; and

15 a controller operable to control access to the first or second recording area according to the received command;

20 wherein when receiving a write command, the controller controls the access so as to select the first or second recording area depending on a data type of the received data and to write the received data to the selected area.

2. The information recording medium according to claim 1, wherein the first recording area stores file
25 system management information necessary for managing the file in the file system, and the second recording area stores entity data of the file managed by the file system.

3. The information recording medium according to
30 claim 2, wherein the data type includes a type indicating

entity data, and a type indicating file system management information.

4. The information recording medium according to claim 1, further comprising an area for storing the address management information for managing correspondence of physical address and logical address of the first and second storage areas.

5. The information recording medium according to claim 4, wherein the address management information includes information about write position of data.

6. The information recording medium according to claim 1, wherein the data type is specified by an argument of the command, and the controller judges the data type on the basis of the value of the argument.

7. The information recording medium of claim 1, wherein the first recording area and second recording area are provided on mutually different storage devices.

8. The information recording medium according to claim 7, wherein the different storage devices have different characteristics of rewrite life.

9. The information recording medium according to claim 1, wherein the controller judges the data type on the basis of a write position of the data.

10. The information recording medium according to claim 9, wherein

the receiving section receives from outside information about position or size of the file system management information which is necessary for managing the file in the file system,

the information recording medium further includes a FS management information register operable to hold the information about position or size of the received file system management information, and

the controller judges the data type on the basis of the value of the FS management information register when receiving the write command.

11. The information recording medium according to claim 10, which, when receiving the information about position or size of file system management information, judges whether the received position of the file system management information is included in the second recording area, and if included, moves data of predetermined size including the received position from the second recording area to the first recording area.

12. The information recording medium according to claim 11, wherein, when the first and second recording areas are provided on nonvolatile storage devices having predetermined data erase units, the predetermined size is same as the size of the larger data erase unit.

13. The information recording medium according to

claim 10, wherein when receiving a write command, the controller judges the data type by comparing the value of FS management register with the write address specified by the write command.

5

14. The information recording medium of claim 1, wherein the first and second storage areas are provided on the same storage device.

10

15. An accessing apparatus for accessing the information recording medium according to claim 1, comprising:

a slot for loading the information recording medium;

15

an access control section operable to control writing and reading of data in the information recording medium loaded in the slot; and

20

a file system control section operable to control the file system established on the information recording medium loaded in the slot, and transmit data and information about the data type to the information recording medium, when writing to the information recording medium.

25

16. The accessing apparatus of claim 15, wherein the file system control section specifies, as the data type, a type indicating data entity or file system management information.

30

17. An accessing apparatus for accessing the

information recording medium according to claim 10,
comprising:

5 a FS management information notice section
operable to inform the information recording medium of
information about position and size of file system
management information,

10 wherein the FS management information notice
section informs the information recording medium of
information about position and size of file system
management information, prior to writing of the file system
management information.

18. A control method of information recording medium,
for managing data stored in the information recording
15 medium with a file system, comprising:

managing writing of data to a first recording
area in first access unit;

20 managing writing of data to a second recording
area in second access unit larger than the first access
unit;

receiving data and a write position together with
a write command;

25 selecting either one of the first and second
recording areas as data writing area depending on data type
of the received data; and

writing the received data to the selected area.

19. The control method according to claim 18, wherein
the data type includes a type indicating entity data of the
30 file managed by the file system, and a type indicating

information necessary for management of the file in the file system.

20. The control method according to claim 18, wherein
5 further comprising receiving information about data type
together with a write command, and judging the data type on
the basis of the received information about data type.

21. The control method according to claim 18, wherein
10 the data type is judged on the basis of the write position
of the data.

22. A method of accessing the information recording
medium according to claim 1, comprising transmitting
15 information about data type of writing data to the
information recording medium together with a write command.

23. A method of accessing the information recording
medium according to claim 10, comprising:
20 transmitting information about position and size
of file system management information to the information
recording medium to set an area for storing the file system
management information in the information recording medium;
and

25 transmitting a write command together with data
and write address to the information recording medium to
write the data.